



PAEWS

Post-Apocalyptic Early Warning System

Wolfhacks 23 Project Proposal Presented By:
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our SITUATION

CONTEXT

- Considered scenario → global apocalyptic chaos
- A meteor has shattered with the moon, causing an enormous explosion that has sent pieces of debris into Earth's atmosphere.
- Need to ensure human survival in dystopian setting
- Need to choose between Code, CAD, or Physical Model
- Sustainable, efficient, long-term idea needed

SPECIFICATIONS

THE PROBLEM

We chose to consider combating effects of natural disasters:

- Needed an idea that considered:
 - Impacts of disappearance of moon
 - Debris in atmosphere
 - Unpredictable phenomena
- Protect lives or better quality of life
- Be efficient, effective, and practical
- Consider innovation and economic/social/environmental factors

01

INVESTIGATION



IDEA 1 - FOOD/SOIL contamination

This idea uses open cv, mediapipe cvzone, and tensorflow libraries in python to create a computer vision model.

This model will use the web camera attached on one's device to detect whether the fruit/vegetable or growing soil is contamination or uncontaminated

Based on the results achieved, it will advise the user whether the food is safe to eat or not.

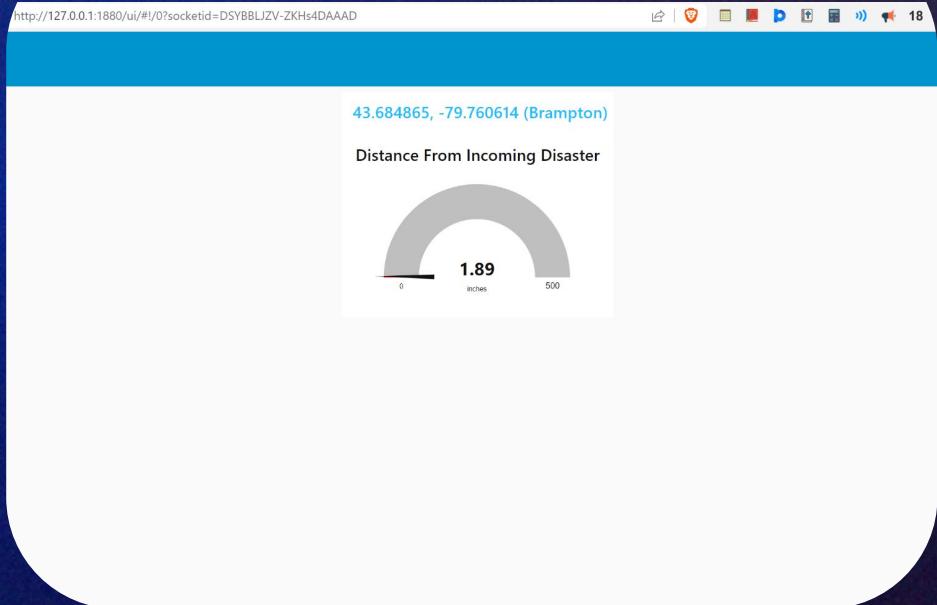
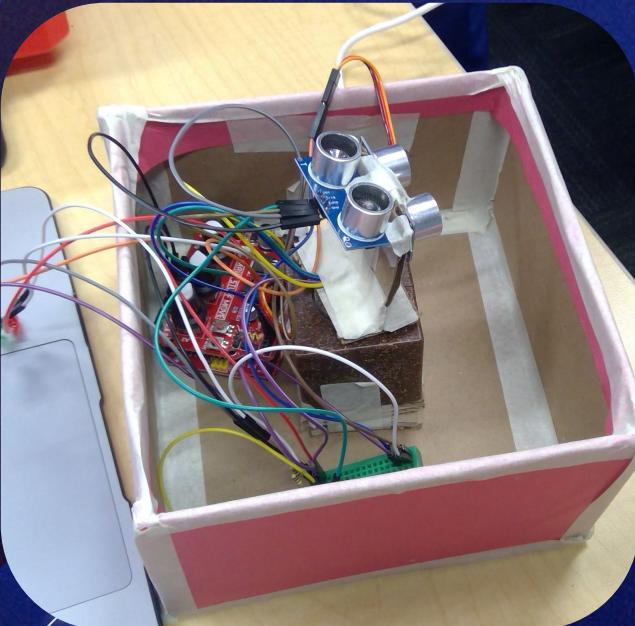


IDEA 2 - DISASTER DETECTOR

This idea uses a physical model, that is coded using Arduino Uno board and the Arduino language. It is further connected to Node-red, an application of Node.js.

It connects to Node.js to display the data collected from the physical model in a more visual manner and further notify the user whether a disaster is nearby via WhatsApp.

construction



PAEWS - Your Region

43.684865, -79.760614 (Brampton)

Distance From Incoming Disaster



PAEWS Network System

43.684865, -79.760614 (Brampton)

Distance From Incoming Disaster

1.89 inches

1.89 inches

1.89 inches

1.89 inches

1.89 inches

43.684865, -79.760614 (Brampton)

Distance From Incoming Disaster

1.89 inches

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EVALUATION - (ABOUT THE PROJECT)

- The solution to the problem was a debris detector and notifier.
- The detector is fully functional as it is able to detect debris and disasters, such as tsunami and display it in a user-friendly manner, while additionally notifying the users about the disaster via WhatsApp.
- This project is unique because there are a number of people that have made a debris detector before, but have never actually been able to implement it into a user-friendly and visually-appealing manner, such as whatsapp.

EVALUATION (NEXT STEPS)

- For next steps, we are going to host a fundraising event to collect funds and raise money in order to gain access to better equipment such as a super-sonic sensor which has the capability to record distances at larger scales.
- We are also going to make our notifiable-program be available on various platforms, such as SnapChat, Discord and Instagram.
- Also, applying it to other potential dangers and natural disasters.

THANK YOU

We'd be happy to take any further inquiries!